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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HALEY, JOSEPH R	
ART UNIT	PAPER NUMBER
2627	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,138	PARK, JONG-NAM	
	Examiner	Art Unit	
	Joseph Haley	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The Chinese Office Action of 8/11/06 has been considered but was lined through so as to not be printed on the front of the patent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Tomita (US 6577566).

In regard to claim 1, the applicant's admitted prior art teaches a method of automatically pausing an optical pickup in a DVD-RAM disc drive, the method comprising: driving a DVD-RAM disc; generating a jump signal in response to a state of the land/groove signal varying; and moving the optical pickup back by 1/2 of a track in response to the jump signal (see paragraph 8 lines 1-5) but does not teach determining whether a tracking error signal is generated; generating a land/groove signal to discern land tracks and groove tracks; determining from which track the tracking error signal has been generated in response to the determination that the tracking error signal has been generated.

Tomita teaches determining whether a tracking error signal is generated (fig. 13B); generating a land/groove signal to discern land tracks and groove tracks;

determining from which track the tracking error signal has been generated in response to the determination that the tracking error signal has been generated (see fig. 13C).

The two are analogous art because they both deal with the same field of invention of switching from land to groove tracks.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the method of the applicant's admitted prior art with the tracking and land/groove signals of Tomita. The rationale is as follows: At the time of invention it would have been obvious to provide the method of the applicant's admitted prior art with the tracking and land/groove signals of Tomita because using the polarity of a tracking error signal will accurately tell if the laser is on a land or a groove.

In regard to claim 2, Tomita teaches wherein the land/groove signal is at a first state when the optical pickup is positioned over the land tracks, the land/groove signal is at a second state when the optical pickup is positioned over the groove tracks, the land/groove signal transits from the first state to the second state or from the second state to the first state, and the optical pickup is positioned over either the land tracks or the groove tracks depending on the state of the land/groove signal (see figs 13 a and c see also column 24 lines 25-40).

In regard to claim 5, Tomita teaches a microcomputer of the DVD-RAM disc drive receives the land/groove signal and determines from which track the tracking error signal has been generated (see fig. 13).

In regard to claims 6 and 7, Tomita teaches wherein the first state is a high level and the second state is a low level and wherein the first state is a low level and the

second state is a high level (see fig. 13C. In regard to the level of the signal, it makes no patentable difference whether the first or second state is high or low, as long as they are different and can be distinguished).

In regard to claim 8, see claim 1 rejection above.

In regard to claim 9, see claim 5 rejection above.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Tomita further considered with Takahashi et al. (US 2002/0054974).

In regard to claims 3 and 4, the applicant's admitted prior art and Tomita teach all the elements of claims 3 and 4 except inspecting a quality of an RF of data recorded in the land tracks in response to data being recorded only in the land tracks; and inspecting a quality of an RF of data recorded in the groove tracks in response to data being recorded only in the groove tracks.

Takahashi et al. teaches inspecting a quality of an RF of data recorded in the land tracks in response to data being recorded only in the land tracks; and inspecting a quality of an RF of data recorded in the groove tracks in response to data being recorded only in the groove tracks (see paragraph 100. Takahashi et al. teaches adjusting the phase separately for the land and groove to improve SNR).

The three are analogous art because they all deal with the same field of invention of recording in optical media.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the method of the applicant's admitted prior art with the tracking and

land/groove signals of Tomita and the separate phase corrections of Takahashi et al. The rationale is as follows: At the time of invention it would have been obvious to provide the method of the applicant's admitted prior art with the tracking and land/groove signals of Tomita and the separate phase corrections of Takahashi et al. because treating the land and grooves separately improves the quality of the signal.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art in view of Tomita further considered with Yamamuro (US 5793722).

In regard to claim 9, the applicant's admitted prior art and Tomita teach all the elements of claim 9 except wherein the optical pickup is automatically paused in response to the land/groove signal.

Yamamuro teaches wherein the optical pickup is automatically paused in response to the land/groove signal (see abst. where Yamamuro teaches stopping a tracking operation while jumping from a land to a groove. See also fig. 16.)

The three are analogous art because they all deal with the same field of invention of switching from land to groove tracks.

At the time of invention it would have been obvious to one of ordinary skill in the art to provide the method of the applicant's admitted prior art with the tracking and land/groove signals of Tomita and the track switching operation of Yamamuro. The rationale is as follows: At the time of invention it would have been obvious to provide the method of the applicant's admitted prior art with the tracking and land/groove signals of

Tomita and the track switching operation of Yamamuro because there would be greater accuracy in switching tracks if the optical pickup was stopped.

Response to Arguments

Applicant's arguments filed 11/30/06 have been fully considered but they are not persuasive. In regard to claims 1 and 8, applicant argues on page 7, paragraph 3 that "This section does not mention or suggest generating a jump signal in response to a state of a land/groove signal varying, and moving the optical pickup back by ½ of a track in response to the jump signal". However, the examiner maintains this rejection because as is shown in the applicant's admitted prior art upon automatic pausing of the optical pickup the pickup is moved back ½ of a track. Tomita teaches moving the pickup whole tracks using the land/groove signals (see column 27 lines 18 and 19). It would have been obvious to use the land/groove signals of Tomita to move the pickup back ½ of a track as is required in the prior art.

In regard to claim 9, applicant argues on page 9, paragraph 4, that AAPA, Tomita and Yamamuro do not teach, "wherein the optical pickup is automatically paused in response to the land/groove signal". However the examiner maintains this rejection because Yamamuro teaches stopping a tracking operation during the generation of a jump pulse which is generated from the land groove signal. During a tracking operation of an optical system, there is movement of the optical pickup. If the tracking operation is paused the optical pickup would be paused; therefore, these two are equivalent.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Haley whose telephone number is 571-272-0574. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jrh

William Korzuch

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